Gandhian Hypothesis Towards Income Inequality in Post Reform Period in India

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ABSTRACT

The central point of the paper is that inequality in Indian context is just not the result of nature and market structure as Gandhi economics stressed. This paper deal with questions beyond the general principles of Gandhian economics in other words it deals with issue of discrimination and inequality with the anthological theories of Gandhian Political economy. This can be a further question for future research study in this area also. It is very interesting point to share is that Gandhi never used the term political economy in his vast writings but some can find the fundamental principle of political economy in his literature. In the third chapter we have developed some Gandhian hypotheses in this context and tested them with certain economic tools and as economic researchers do and it critically examine the data with some high argument and facts in philosophical manner as political scientists do, so this research in highly interdisciplinary in nature. It not only focuses on the economic parameter of inequality and discrimination but dealt with problem taking some value judgments in mind. The existing inequality differs in Gandhian view point but somewhere data support the Gandhian hypotheses. No doubt inequality has increased in every sphere of economic life. When we were addressing the question of Inequality and Discrimination in the third part of paper or indexing the Gandhian hypotheses towards inequality and discrimination certain aspects and question further came in to picture.

1. INTRODUCTION

The socio-economic equity can be achieved through the Gandhian egalitarian reforms (Mrydal, 1958). He favored the Gandhian concept of less wants and reduction in the unnecessary consumptions. The main cause of socio economic failure in the developing nations is the consumption pattern of these economies. The redirection of demand and production element in building a more egalitarian society so called Gandhian

utopian society but at the same time he is failed to describe the adverse effect of redirection in demand and production. This redirection can create unemployment and recession in an economy, which is also a one type of social inequality or socio-economic failure.[1] Gandhian equality and justice can be achieved through redistribution of transformation of society or economy. The concept of non-exploitation and trusteeship determine the nature of institutions that generate the environment conducive to Gandhian Economic principles (Diwan and lutz, 1995). Nom exploitation involves elimination privileges of all kinds. He describes the equality is an objective a social policy only it is misconception while talking on equality no one can neglect the economic policy.[2]

There is a less scope of exploitation of labor in swadeshi economy. She also pointed out that mix combination of swadeshi and trusteeship theories provide platform to achieve economic equality in relative form but not in absolute form (Anajaria, 1958). But her analysis is based on qualitative study not quantitative study. Another focus on the trusteeship, social justice and transformation of society (Rao, 1970). He also talked about the egalitarian reform to achieve higher degree of social equality and remove any kind of discrimination.

Gandhi's approach to equity is thus similar to that Rawl's maximum principle of justice (Dasgupta, 1996). He said that society's political and economic institutions may be said to be just if they maximize the level of the welfare of the representative member of worst group. Das Gupta linked with this Gandhian theory of exploitation and inequalities with the concern towards gender and caste and religion based discrimination.[3] Gandhian concept of equity and justice is associated with his technique of sarvodya (Mehta, 2011). He described that sarvodya is an ideal economic order. To him "sarvodya wants to eradicate human inequality and reduce to physical inequality" The major drawback of his analysis is that it just only talks in philosophical words. There is a lack of empirical elements in his theory.

The socio-economic failure is linked with the social justice and Gandhian economic order (Sharma, 2003). He argued that Gandhian model of sarvodaya economic order has built in the mechanism of growth and justice not only to human race but also the nature. A different methodology to explore the Gandhian Perspective of exploitation, inequality and distributive justice (Ghosh, 2007). With the help of data of 16 industrial economies and non-industrial economies of 30 years, he measured the inequalities to test the major Gandhian Hypotheses that "Capitalist industrialization leads to the intensification of inequalities". This study on analyzing the data has proved that the countries following capitalist method of production have shown an upward trend in income inequality. Similar kind of study he has done again in year 2012 to test the Gandhian assertion that capitalist industrialization exacerbates economic disparities.[4]

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[1] For whole discussion where Myrdal has done deep analysis on the Gandhian Perspective on Inequality or equitable equality, See Mathur, J.S, Gandhi in the Mirror of Foreign Scholar, Gyan Publishing House New Delhi, 2007. In same book there is one article written by the Jim Tinbergan about Gandhi's concept of equality and Justice.

[2] See Diwan and Mark Lutz(ed), Essays in Gandhian Economics, Gandhi Peace Foundation, New Delhi, 1985, In The chapter six of the book entitled" The Economics of Love" An attempt at Gandhian, he Economics, he derived an important theorem to describe the Gandhian perspective to solve the problem of economic privilege.

[3] See, Das Gupta, Ajit K, 'Gandhian Economics' in Ajit K Dasgupta, A History of Indian Economic Thought, Routedge, London, pp. 130-62. See also, Das. Gupta, Ajit K., Gandhi's Economic Thought, Routledge, London, 1997.

[4] See, Ghosh, B.N, Beyond the Gandhian Economics, towards a creative destruction, Sage Publications, New Delhi, 2012. In this book, Chapter 4 provide useful insight towards, Gandhi's Perception of Poverty and Economic Disparities.

R.P Mishra (2010) has presented the Gandhian model of inclusive development[5] and in this paper he has raised several questions over the present model of Growth theory which is commonly known as GDP growth model. The important point which this study highlighted that is relate to the regional dimension of growth pattern. Regional disparities, disparities in human development indicators along with inequalities of income resource and employment have important place in Gandhian development model as Mishra propounded the new dimension of Gandhian Inequality paradigms. The other core principle of Gandhian socio-economic thoughts has been included regional dimension of Inequality in our map and as well as in the fifth chapter of this study we have analyzed this fact in the neo-liberal market economic policy. 'If development means improvement in the quality of life and living of the people, it is mal-developing and in some respects even regressing. The poverty syndrome that gripped India during the colonial era persists and violence in a country is spreading fast. Regional disparities and rural urban divide are widening'.[6]

Nadkarni (2014) also tried to explore the Gandhian idea of justice. In his essay entitled 'Ethics and development, he linked with developmental theories of modern world with growing consumerism and economism? Individualistic ambition towards money and earning income can be said to economism. As Gandhi was against the production of luxuries goods or more luxurious life style, unlike Gandhian principle of non-possession and value oriented consumption, economism promotes greed and further leads to intensification of disparities in societies.[7]

How free trade policy, market economy and functioning of competitive environment leads to unequal distribution of assets, wealth and income? It is the subject matter of Nobel Laureate new book The Price of Inequality (Stiglitz, 2012). He criticized the free market ideas for the production of inequalities. This book favors Gandhian ideas in a deeper sense, like when Joseph criticized the free trade system and the process of globalization; he seems to be near the Gandhian perspective of dependency theory or swadeshi model. Impact of technological advancement on wage inequality and employment as he stressed that near the Gandhian doctrine of favoring the labour-surplus economy. Importantly in this study we can find more Gandhian perspective. As Gandhi believed that growing consumerism is an important factor for uneven distribution of wealth in society. Although nowhere in this book Joseph used and mentioned word Gandhian or Gandhi but in this section of review it find place because of nature of his study that how capitalistic economic society of America is unequal[8].

Review of Empirical Studies (U and Inverted 'U' Hypothesis, Inequality and Growth Relationship)

Kuznet (1955) conducted a study for five countries including (India, Ceylon, Puerto Rico, United States and United Kingdom) to examine the relationship between economic growth and income inequalities. After measuring the income shares of various quintiles, he propounded a theory of inverted U hypotheses.

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[5]   It can be better said to Sarvodaya Model of Gandhi as Prof Mishra himself stressed on it, but for the better understanding of Sarovadaya model one should see the Gandhi, M.K, Sarvodaya, Navajivan Publishing House, Ahemadabad, 1951,reprint 2007, for implications and its application to village centric economy and livelihood see, Dharmadhikari, Dada, Sarvodaya Darshan & Ahinsak Kranti ki Prakriya, Sarv Seva Sangh Prakashan, Rajaghat, Varanasi, 1998.

[6]   See, Mishra, R.P, and Inclusive Development: The Gandhian Model, in Anashakti Darshan, Vol. 6, No. 1, January-June, 2010, p2.

[7]   See Nadkarni, M.V, Ethics for our Times, Essays in Gandhian Perspective, Oxford University Press, New Delhi, 2011.

[8]   Stiglitz, The Price of Inequality, Allen Lane, Penguin Books, London 2012.

Kuznet observed that greater inequalities in developing nations, his inverted U hypotheses said that in the early phase of development inequality increases but in the later stage it decreases. Overall point of view of his study was that inequality is an important part of industrial development process.

Oshima (1962) argued that inequality increases up to and through the semi-developed stage and declines once a country is fully developed. The main loopholes behind this study that this predication was not tested. Monsters (1970) did a study on the patterns of income distribution in selected developing countries. Findings of his study suggested that income equality declined over time with the rise in level of income. Cline (1975) conducted a study on income distribution in South American countries and found that inequality increases according to classes. Bardhan (1974) studied about pattern of Income distribution in urban and rural areas of India in mid-sixties. The study found that during the period of slow growth rate Gini coefficient declined in both of the areas.

Okun (1975) gave his leading theory of economic performance and inequality. Unlike earlier studies on inequality and growth relationship his study focus on how market intervention affects economic performance and competition and how inequality exists.

Ahluwalia (1996) examined the relationship between the distribution of Income and the process of economic development with the help of cross country data on income inequality. His study shows average absolute income of lower percentile groups rising as per capita GNP rises. The results of his study do not support the hypothesis that decline in relative income inequality reflects a prolonged absolute improvement of large sections of the population.[9]

Papanek and Kyn (1985) studied cross-section and time series data for 83 countries and found there is no systematic relationship between rate of the economic growth and income equality. They found some support from Kuznet Hypothesis that as per capita income rises, inequality increases. However, Fields (1989) through the hypothesis in his study confirmed that as economies progress, poverty declines. He proved this by studying data for 18 countries.

Anand and Kanbur (1993) examined about the inequality and growth relationship in a very critical manner. They adopted rigorous statistical tools to test the hypothesis with data set of sixty countries. In the contrast to Kuznet theory on inequality, they propounded "U" curve relationship between economic growth and inequality. His study finds an important place in existing literature on growth strategy due to its impact on process of globalization.

Later on Martin Ravallion (2001) studied about that how process of globalization has increases inequality between and within nations. There is enough and more confirmation that the present patterns of growth and globalization are increasing income disparities.[10]

Atul Kohli (2012) has analyzed the magnitude of poverty and inequality in Indian context with political economy framework. He has critically examined the role of state intervention and pro-business strategies to induce inequalities in economies during the reform process. This study also highlights this fact that

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[9] For the Regional dimension of Inequality and Growth relationship Alhwalia did a study after post reform period about the Growth performance and impact on Indian States, See, Balakrishnan, Pulapare, Economic Reforms and Growth in India, Essays from Economic and Political Weekly, Orient Black Swan Pvt Ltd, 2011, New Delhi.

[10] See, Ravallion, Martin, ' Inequality is bad for the Poor' Washington, DC, Develoment Research Group, World Bank, 2005, See also this debate on The Economist, June 20, 2000, p6, visit www.ifg.org/store.htm

inequalities are not just result of policy failure but it depends upon the socio-economic characteristics of state and political ideology of government. Adaptation of pro-business growth strategy (Against the Gandhian pro-agriculture) by the state also shows the nature and structure of economy. 'Pro-business growth in India has been accompanied by growing economic inequality. The inequality is manifest on several dimensions: across regions, city versus country side and across the cross lines, especially within cities".[11]

Persson and Tabellini (1994) examined the question of 'Is inequality harmful for economic growth?' Drawing on the theories of endogenous economic growth and endogenous economic policy, they formulated a model that relates equilibrium growth to income inequality and political institutions. The authors summarized their decision in a straightforward adage: Inequality is destructive for growth and development. The reason being that it prompts approaches that don't ensure property rights and full private appropriation of returns from venture. This implication is strongly supported by the historical evidence of narrow cross-section of nations and by the post-war evidence from a wide cross-section of nations.

2. RESEARCH OBJECTIVES

The principle objective of this study is to test the Gandhian hypothesis of inequality and discrimination in the contemporary Indian economy. In the light of main objective specific objectives are following:

1. To formulate the Gandhian Hypotheses of Inequality and discrimination through explanatory research.

2. To analyze the change in pattern of income inequality across Indian states over time in Gandhian framework.

3. To examine the extent and change in caste induced inequality across states and over time in Gandhian frame work.

4. To suggest a Gandhian alternative policy towards tackle with the problem of inequality and discrimination.

5. To examine the contemporary relevance of Gandhian ideas on inequality and discrimination in terms of new economic policy.

3. RESEARCH HYPOTHESIS

$H_0 1$: Inequality is more marked in developed states (Highly Industrialized) in comparison to developing or underdeveloped states (Agricultural states) in terms of wage.

$H_0 2$: Inequality is more marked in developed states (Highly Industrialized) in comparison to developing or underdeveloped states (Agricultural states) in terms of Income.

$H_0 3$: Inequality is more marked in developed states (Highly Industrialized) in comparison to developing or underdeveloped states (Agricultural states) in terms of Consumption.

$H_0 4$: Inequality is more marked in developed states (Highly Industrialized) in comparison to developing or underdeveloped states (Agricultural states) in terms of wealth.

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[11] See, Kohli, Atul, Poverty Amid Plenty in the New India, Cambridge University Press, New Delhi, 2012, See chapter 2 State and Economy: Want and Amid Plenty, pp. 121-123.

H$_0$5: Gandhian Inequality Paradigms Agricultural Growth reduces inequalities or there is a negative relationship between growth of agricultural sector and income inequalities and growth of industries or industrial sector leads towards intensification of Inequalities

4. RESEARCH METHODOLOGY

Appropriate econometric and statistical techniques have been used for determining the relationship between economic growth and income inequality. The list of major tools and techniques used in for the analysis are: (i) Annual average Growth rate (ii) Compound Growth rate, (iii) Coefficient of Variation, (iv) Gini Coefficient, (v) Lorenz Curve, (vi) Theil mean log Deviation Index, (vii) Theil Entropy Index, (viii) Atkinson Index, (ix) Decomposition of Gini, Atkinson and Theil index by Population groups.

The reference period of this study is post reform era and constructed according to the quinquennial rounds of consumption expenditure survey of NSSO. The total study period is twelve years and ranges from 1993-94 to 2011-12, covering three large quinquennial rounds of NSSO (50th, 55th and 61st).

Analysis and Findings: Inequality and Discrimination (1991 to 2014-15)

Indian economy is experiencing a high rate of growth and it is foreseen to grow at a higher rate in the near future. The spectacular economic growth and the rigorous economic reform policies being undertaken have led many to dread the exclusionary in nature that the high growth may bring which may be characterized by jobless, ruthless, voiceless, rootless, and futureless growth. Clearly today India is identified as an economy with an "impressive" but "jobless growth" and a "booming economy with growing gaps" where the stunning successes made have not been shared by all equally. The Planning Commission has also conceded that economic growth has failed to be sufficiently inclusive, particularly after the mid-1990s. Even after more than 7 decades of independence, from almost two centuries of British rule, large scale poverty shadows India.

According to the new World Bank's estimates on poverty, based on 2005 data, India has 456 million people, 41.6 per cent of its population, living below the new international poverty line of $1.25 (Purchasing Power Parity) per day. The World Bank further estimates that 33 per cent of the global poor now reside in India. Moreover, India also has 828 million people, or 75.6 per cent of the population living below $2 a day, compared to 72.2 per cent for Sub-Saharan Africa. On the other hand, the Planning Commission of India uses its own criteria and has estimated that 27.5 per cent of the population was living below the poverty line in 2004–2005, down from 51.3 per cent in 1977–1978, and 36 per cent in 1993-1994. The source for this was the 61st round of the National Sample Survey (NSS) and the criterion used was monthly per capita consumption expenditure below ₹356.35 for rural areas and ₹538.60 for urban areas.

The scope of analysis in this study is restricted to a comparative analysis of the trends in economic growth, income inequality and discrimination (Caste induced Inequalities) across fourteen major and most populous States (excluding the Himalayan states, the northeastern states, and the Union territories). The fourteen States taken up for detailed study are: Andhra Pradesh, Bihar, Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal. The included states have a combined population accounting for more than 90 per cent of India's population. Also, the area covered by these states is 2.7 million sq km., accounting for 83 per cent of India's total land area.

Testing of Gandhian Hypotheses with Arguments: Dependency Theory Globalization and Inequality & Discrimination:

H_0: Inequality is more marked in developed states (Highly Industrialized) in comparison to developing or underdeveloped states (Agricultural states) in terms of wage, Income, Consumption and wealth.

Gandhi's dependency theory rejects any kind of openness in economy. This point is noticeable that India adopted the reform strategy in 1991, which was against the Gandhian paradigms of International trade. Examine the nature and magnitude of inequality in India after post liberalization period is a multidimensional exercise. If rich states grow faster than poor states and inequality in consumption expenditure is higher in richer state in comparison to poor states than it means it proved Gandhian hypotheses that "Urbanization leads towards inequalities", but analyses should be beyond the hypotheses testing. Gandhi's question towards intensification of inequalities should be look at the political economic frame of mind. The main argument of paper also focuses on this important point. Analysis of data suggest that in post reform period with a Gini coefficient of 36.8 for the period 2004-05, India is rated as having moderate inequality compared with several other developing nations (2009). According to the world bank estimates (2009) the difference in consumption expenditure across the different section of population is fairly high whereas the bottom 10% of the population consumes only 3.6% of the total consumption expenditure in the country the top 10% accounts for a 31%share and top 20% finds a share of 40%. In the post-reform period and, the gap between rich and poor has increased during the phase of higher economic growth. See also the Table 5.15. Why this happened or what are the main causes of increasing divide between rich and poor and huge disparity in the consumption expenditure. Let us find the answer in the one of the important principle in Gandhian political economy i.e. dependency theory. New economic order or reform in economy introduced high technological skills in the country and it also lead towards the demand and supply gap between unskilled and skilled worker. Globalization of an economy open up chances for the one section to become highly technological and skilled friendly and in another way it also denies the few section to remain alienate from the technological change. Gandhi knew that this gap very well not in economic term but in the societal change so he was opposing the higher dependency on foreign capital and technology in rural economy or undeveloped economy. His doctrine of international trade throws light upon this increasing inequality. Gandhi rejected the doctrine of Globalization, he saw it as an unnatural phenomenon. Even Gandhi had not proved his theory through any kind of mathematical or statistical exercise but as a philosopher of political economy he was well aware of this fact that globalizing the economy will produce higher degree of inequalities in society. Let us explain this relationship between phenomena of globalization and increasing disparities in the Gandhian framework detail. First it is not a natural phenomenon, but an ideology to promote rule by corporations. It is not a new stage of human evolution but a new version of colonialism, it is not going to increase citizen's freedom and democracy by reducing the power, but will subordinate citizen to corporations after disassembling the state. Globalization or dependency on foreign capital promote growth only in financial transactions and it increases the number of financial institutions in an economy and as Nobel Laureate Professor Joseph Stiglitz pointed out in his book "The Price of Inequality" is that "Both trade globalization (the movement of goods and services) and capital market globalization (International financial market integration) have contributed in growing inequality in different ways). Needless to mention that during the colonial economy India was suffering with mass poverty and disparities. It was scholarly work of Dada Bhai Naroji who proved this point against the colonialism exploitation. What bearing the

Indian economy should take is the point of debate that in the nation. Protagonists of market guided globalization contend that the current issues came up because the economy was not completely liberalized. So they advocate 'intense advances' meaning more liberalization, opening up the economy completely to the global market powers etc. Full dependency on imported technology and skilled labour in their opinion create a competitive economy, but one should remember this that Gandhi was against the trade and market globalization due to this competition. The base of his contentions was that there is no alternative option to globalization. 'Globalize or Perish' is their proverb. The individuals who are reproachful of the present assortment of globalization have illustrated confirmation to demonstrate that the new economic policy will only prompt outrageous concentration of wealth and power in the hands of barely 20% of the global populace. The rest will be left to compete for by the rest 80%. Multinational corporations have turned out to be wealthier and more powerful than nations and World Trade Organization has begun assuming political role besides economic. This will create a profoundly divided world, an asymmetry that is foreboding. So, they contend that, they must change their socio-economic policy, take a turn towards an equitable, sustainable and self-reliant path of development.

Table 1.1
Gini Coefficient Income Distribution in India

State	1993-94			2004-05			2009-10		
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Andhra Pradesh	0.29	0.323	0.312	0.294	0.375	0.345	0.285	0.395	0.364
Assam	0.179	0.29	0.216	0.199	0.32	0.24	0.251	0.33	0.283
Bihar	0.225	0.309	0.253	0.213	0.355	0.259	0.234	0.358	0.273
Gujarat	0.24	0.291	0.279	0.271	0.31	0.334	0.261	0.338	0.343
Haryana	0.314	0.284	0.311	0.339	0.366	0.355	0.31	0.368	0.339
Himachal Pradesh	0.284	0.462	0.325	0.31	0.326	0.328	0.314	0.415	0.336
Jammu Kashmir	0.24	0.287	0.27	0.247	0.249	0.26	0.24	0.315	0.266
Karnataka	0.27	0.319	0.309	0.266	0.369	0.361	0.24	0.341	0.35
Kerala	0.301	0.343	0.316	0.381	0.41	0.393	0.439	0.527	0.473
Madhya Pradesh	0.28	0.331	0.315	0.277	0.407	0.357	0.297	0.367	0.351
Maharashtra	0.307	0.357	0.376	0.312	0.378	0.393	0.276	0.423	0.409
Odisha	0.246	0.307	0.282	0.285	0.353	0.324	0.268	0.401	0.326
Punjab	0.281	0.281	0.285	0.294	0.402	0.351	0.297	0.382	0.339
Rajasthan	0.265	0.293	0.28	0.25	0.371	0.303	0.23	0.396	0.3
Tamil Nadu	0.312	0.348	0.344	0.323	0.361	0.379	0.271	0.34	0.342
Uttar Pradesh	0.282	0.326	0.302	0.291	0.367	0.327	0.281	0.367	0.322
West Bengal	0.254	0.339	0.308	0.274	0.383	0.353	0.245	0.393	0.338
All India	0.286	0.344	0.326	0.305	0.376	0.363	0.3	0.393	0.37

Source: Planning Commission of India.

Higher value of correlation coefficient indicates that states which have higher rank in inequality in urban consumption expenditure have higher rank in inequality in rural consumption expenditure also. But After the analysis very interesting result has been occurred here. For the year 1983 higher degree of positive correlation indicates states have similar pattern of consumption inequality in rural and as well as

urban areas noticeably this period was pre–reform period, but after the reform process for year 2004-05 and 2009-10 low degree of correlation coefficient is resulted, this is a clear indication that distribution of consumption expenditure in India vary from state to state, See Next Table:

Table 1.2
Income Inequalities (1993-94 to 2009-10) Ranking of Major States

Year	Rank 1993-94			Rank 2004-05			Rank 2009-10		
State	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Andhra Pradesh	13	10	12	11	12	9	12	12	15
Assam	1	4	1	1	3	1	6	2	3
Bihar	2	8	2	2	6	2	2	6	2
Gujarat	3	5	4	6	2	8	7	3	12
Haryana	17	2	11	16	8	12	15	9	9
Himachal Pradesh	12	17	15	13	4	7	16	15	7
Jammu Kashmir	3	3	3	3	1	3	3	1	1
Karnataka	8	9	10	5	10	14	3	5	13
Kerala	14	14	14	17	17	16	17	17	17
Madhya Pradesh	9	12	13	8	16	13	13	7	14
Maharashtra	15	16	17	14	13	16	10	16	16
Odisha	5	7	6	9	5	5	8	14	6
Punjab	10	1	7	11	15	10	13	10	9
Rajasthan	7	6	5	4	11	4	1	13	4
Tamil Nadu	16	15	16	15	7	15	9	4	11
Uttar Pradesh	11	11	8	10	9	6	11	7	5
West Bengal	6	13	9	7	14	11	5	11	8

Source: Planning Commission (Excluding Delhi and Union Territories).

Table 1.3
Expenditure in Rural Areas (1973-74 to 2009-10)

State	Rank 1973-74	Rank 1977-78	Rank 1983-84	Rank 1993-94	Rank 1999-00	Rank 2004-05	Rank 2009-10	Average Ranking
Andhra Pradesh	4	10	5	5	11	6	7	6.857142857
Assam	17	18	18	18	17	18	13	17
Bihar	8	15	15	17	16	17	17	15
Delhi	18	12	8	14	1	13	11	11
Gujarat	15	14	16	15	13	11	12	13.71428571
Haryana	3	13	12	3	9	2	4	6.571428571
Himachal	13	16	13	8	12	5	3	10
Jammu & Kashmir	16	17	17	16	18	16	15	16.42857143
Karnataka	6	5	4	9	8	14	16	8.857142857
Kerala	1	3	2	4	3	1	1	2.142857143
Madhya Pradesh	5	4	6	7	7	12	5	6.571428571

(Contd...)

State	Rank 1973-74	Rank 1977-78	Rank 1983-84	Rank 1993-94	Rank 1999-00	Rank 2004-05	Rank 2009-10	Average Ranking
Maharashtra	11	2	10	2	4	4	8	5.857142857
Oddisha	12	8	14	13	6	8	10	10.14285714
Punjab	9	7	11	10	10	9	6	8.857142857
Rajasthan	7	1	1	11	15	15	18	9.714285714
Tamil Nadu	10	6	3	1	2	3	9	4.857142857
Uttar Pradesh	14	9	7	6	5	7	2	7.142857143
West Bengal	2	11	9	12	14	10	14	10.28571429

Source: Calculation accordingly planning commission data (Excluding other sates due to availability of data and comparison between pre reform period and post reform period is possible when we exclude new sates.

Table 1.4
Consumption Expenditure in Urban Areas (1973-74 to 2009-10)

State	Rank 1973-74	Rank 1977-78	Rank 1983-84	Rank 1993-94	Rank 1999-00	Rank 2004-05	Rank 2009-10	Average Ranking
Andhra Pradesh	11	12	8	8	10	6	6	8.714286
Assam	8	11	17	14	11	16	17	13.42857
Bihar	16	16	10	10	8	13	13	12.28571
Delhi	2	8	3	18	3	14	11	8.428571
Gujarat	17	15	16	13	16	17	16	15.71429
Haryana	6	14	9	16	15	10	10	11.42857
Himachal	14	17	7	1	12	15	3	9.857143
Jammu & Kashmir	18	6	18	15	18	18	18	15.85714
Karnataka	10	5	4	9	6	9	12	7.857143
Kerala	1	4	1	4	7	1	1	2.714286
Madhya Pradesh	15	2	11	6	9	2	9	7.714286
Maharashtra	4	3	5	2	2	5	2	3.285714
Odisha	3	10	15	11	13	12	4	9.714286
Punjab	12	1	14	17	14	3	8	9.857143
Rajasthan	13	18	2	12	17	7	7	10.85714
Tamil Nadu	7	7	6	3	1	11	14	7
Uttar Pradesh	9	9	12	7	5	8	15	9.285714
West Bengal	5	13	13	5	4	4	5	7

Source: Calculated accordingly Planning Commission Data.

Table 1.5
Correlation between Ranks of Rural Consumption inequality and
urban consumption inequality Inter State

Year	1973-74	1977-78	1983	1993-94	1999-00	2004-05	2009-10
Correlation Coefficient	0.17	0.44	0.77	0.56	0.27	0.41	0.38

Source: Scholar's own calculation based on Tables.

Table 1.6
Relationship between urban consumption inequality and rural consumption inequality

State	Correlation Coefficient	State	Correlation Coefficient
Andhra Pradesh	0.36	Gujarat	−0.37
Assam	−0.26	Haryana	0.24
Bihar	−0.53	Himachal	0.511
Delhi	0.32	Jammu & Kashmir	−0.21
Kerala	0.77	Karnataka	0.76
Madhya Pradesh	−0.42	Rajasthan	−0.03
Maharashtra	0.42	Tamil Nadu	0.59
Odisha	−0.08	Uttar Pradesh	−0.27
Punjab	0.66	West Bengal	−0.07

Source: Scholar's own calculation based on Planning Commission Data.

Table 1.7
Inequality Improvement Matrix for 18 States form the period of 1990-2009-10
in distribution of consumption expenditure

State	Urban Inequality	Rural Inequality	Over all
Andhra Pradesh	No Improvement	No Improvement	No
Assam	Improvement	No Improvement	No
Bihar	Improvement	Improvement	Yes
Delhi	Improvement	Improvement	Yes
Gujarat	No Change	No Improvement	No
Haryana	No Improvement	No Improvement	No
Himachal	Improvement	No Improvement	No
Jammu & Kashmir	No Change	No Improvement	No
Karnataka	Improvement	Improvement	Yes
Kerala	Improvement	No Improvement	No
Madhya Pradesh	No Change	No Improvement	No
Maharashtra	No Change	Improvement	No
Odisha	No Improvement	Improvement	No
Punjab	No Improvement	No Improvement	No
Rajasthan	No Improvement	Improvement	No
Tamil Nadu	Improvement	Improvement	Yes
Uttar Pradesh	Improvement	No Improvement	No
West Bengal	Improvement	No Change	No

Source: Scholar's own preparation.

It is very easy to understand from the Table 5.7 during the reform process or in the period of twenty years, between 18 states only 5 states have got succeed in to eradicate consumption inequalities in both rural as well as urban areas. 8 States have succeeded to reduce their uneven consumption expenditure in urban areas but in rural areas only 7 states have able to improve their performance. It is also noticeable that

some rich states (richness of state is defined through high value of per capita net state domestic product) have not able to reduce improvise their positions neither in rural nor in urban areas.

Amongst poor sates only Bihar's position has become find positive change in the process of inequality reduction.

In this connection The Government of India Published National Human Development report 2001 and published the state-wide Gini Coefficients for the years of 1983, 1993-94 and 1999-2000. Comparing the level of inequality between 1993-94 and 1999-2000, among the 32 states and union territories reported seven sates experienced an increase in rural inequality and fifteen states experienced in urban inequality (Ghosh and Pal 2007).

Table 1.8
Income Inequalities in India

Year	Inequality Rural Areas(Gini)			Inequality Urban Areas (Gini)		
	1993-94	*2004-05*	*2009-10*	*1993-94*	*2004-05*	*2009-10*
Rich States	0.28	0.3	0.291	0.32	0.35	0.38
Poor States	0.25	0.26	0.26	0.31	0.36	0.35

Source: Author's own calculation based on NSS Data, Classification is based on States' per capita net domestic product (National Income Accounts). See Appendix for the ranking of States.
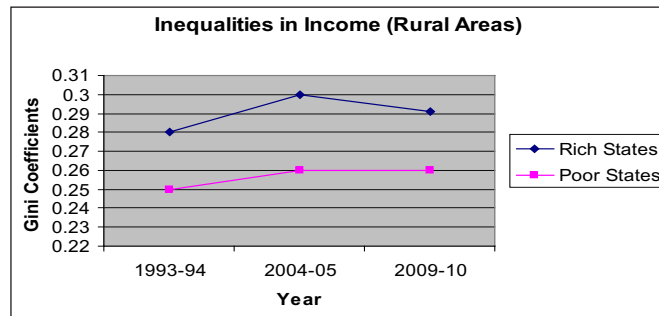
It is clear from the table that after post reform period or introduction of new economic policy inequalities in rural areas are high in comparison to urban areas in all respective years 1993-94, 2004-05 and 2009-10, in year 2009-10 values of Gini coefficient in Urban areas in rich sates and poor sates are 0.38 and 0.35 . In rural areas these values are 0.29 and 0.26 respectively. This shows that regional inequalities are rising in the dimension of rural-urban divide. Another interesting finding which has found by that not only rural-urban divide but in the case of Rich and Poor sates income inequalities are raising very rapidly in both rural as well as urban areas. Rich states have more uneven income distribution in comparison to poor states. In year 2009-10 in urban areas rich sates have grown more uneven in comparison to poor states. This point is interesting because it suits the Gandhian Hypotheses that as economic progress on the material wellbeing or on the basis of strategy of economic growth (income parameters) rural-urban inequality and regional inequality also increases with this pace. Widening rural-urban divide and regional inequality in terms of income parameter is presented here. This table also highlights the fact that after the 20 years of new economic policy which started in 1991, Inequalities is becoming major concern for the economist community as it was denying the main stream economic theory of economic inequalities that

growth reduces inequalities in the later stage of economic development in developing societies (Kuznets, 1955). When we plot this data in to graphs we do not find inverted U Shape curve for income inequalities with respected to economic growth and time. It will come in the shape of "U" as Gandhian Framework suggested (Ghosh, 2012)

Testing of Gandhian Hypotheses: Economic Growth and Income Inequality (U Hypotheses) (1993-94-2011-12)

In this section with the help of Gini and Entropy indices we will discuss about the growth inequality relationship in Gandhian context.

H_05: Gandhian Inequality Paradigms Agricultural Growth reduces inequalities or there is a negative relationship between growth of agricultural sector and income inequalities and growth of industries or industrial sector leads towards intensification of Inequalities.

Table 1.9
Inter State Inequalities: Correlation between Gini Measure of Inequality and Growth Rate

Category	1993-94 To 1998-99	1999-00 to 2004-05	1993-94 to 2004-05
Agriculture	−.265	−0.656	−.443
Primary Products	−6.45	−0.551	−0.361
Manufacturing	.272	0.665	0.469
Registered Manufacturing	0.288	0.545	0.358
Unregistered Manufacturing	−1.35	0.812	-0.406
Services	0.573	0.732	0.360

Source: Calculations based on National Income Statistics (All correlation significant at 0.10 levels).

This table indicates that One of the important aspect of Gandhian economics that production of agricultural and primary products commodities reduces income inequalities in an economy. Gandhi believed in the production of primary goods more which consumed by the mass people of the country. As table indicates that there is higher degree of negative correlation between growth rate production of primary goods and inequalities and it indicates that when production of these commodity increases inequality level decreases. Hence here the Gandhian hypothesis is accepted. With the expansion of service sector in an economy inequalities of income rises with very faster rate and it is also visible from the table that there is higher degree of positive correlation between growth of service sector and income inequalities and between the period of 1990-2004-05 the value is very high and it is also statistically significant.
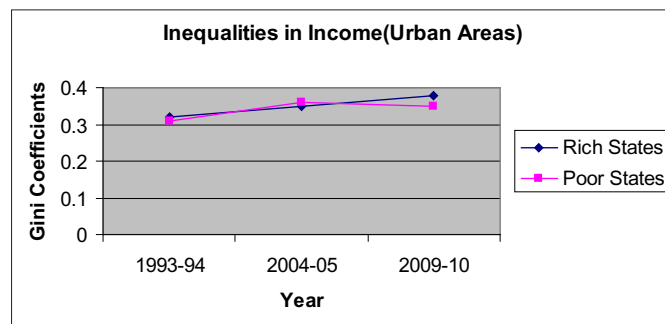
Table 1.10
Economic Growth and Interstate Inequality: Correlation between Calculated Gini and Sectoral Growth Rate (GSDP & NSDP)

Category	1993-94 to 1999-2000	1999-2000 to 2004-05	2004-05 to 2011-12
GSDP & Gini	–0.29	–.0.57	–0.24
NSDP & Gini	–0.16	–0.49	–0.23
GSDP & ENTROPY	–0.45	–0.75	–0.25
NSDP & ENTROPY	–0.24	–0.78	–0.35

Source: Calculations based on CSO Data.

It is clear from the table that in the case of agricultural, primary, products and infrastructure, the growth and inequality are negatively co-related. On the other hand, there is a positive correlation between Manufacturing, Industrial and service sector. The more increase in agricultural production thus leads towards the more equitable distribution of per capita income rather than focusing on industrial sector or services sector. The case also defends Gandhi's assertion that goods primary sector and production of necessary goods should be maximized to reap the benefits of economic growth. If there is uneven pattern of income distribution occurs in an economy to Gandhi only way to reduce these disparities through production of primary goods. Another way in which we can interpret this table that between growth rate of services sector and its high correlation with the Gini coefficient of Per Capita Income Distribution. Table depicts that during the period of 1999-2000 to 2004-05 strong positive correlation between services sector and inequality highlight the Gandhian perspective towards openness of an economy as Gandhi was against the globalization process or dependency theory in earlier part we have discussed in the detail, here it confirms that openness of economy or taking more money from the foreign market to expand service sector leads towards the intensification of inequalities

Table 1.11
Inequalities in consumption food (Basic Necessities) and Non-food items (Rural –Urban)

Year 1993-94 to 2004-05	Food Items		Non Food Items	
	Gini (Rural Areas)	Gini (Urban Areas)	Gini (Rural)	Gini (Urban)
Average Gini Rich States	0.25715	0.284	0.4721	0.5419
Average Gini Poor States	0.2351	0.2591	0.4702	0.5288

Source: Scholar's own calculation based on NSS 50[th, 55th] and 61st Round of Consumer Expenditure Survey and National Income Statistics.

In the previous table we have analyzed the income inequalities pattern in India in rural and urban areas in the comparative perspective of rich and poor states. In this table in year 2004-05 as NSSO 61st round consumer expenditure survey provided the data we will deal with the inequalities in consumption pattern in comparative perspective between rich and poor states on the classification based on food (Basic necessities) and non-food items. Gandhi's concern towards inequalities in basic necessities has been taken here as his view over the difference between food items and non-food items.

It is obvious from the table that in year 2004-05 those inequalities in the consumption of Non-food items in urban areas are more in comparison to rural areas in both rich and poor states. In urban areas while rich states have highly skewed nature of consumption of non-food items rather than poor states. On the consumption of non-food items in both rich as well poor states in urban areas Gini values are

Table 1.14
Decile Class Inequality: Mean Per Capita Expenditure Inequality in Consumption Expenditure (Rural Areas)

Year	Gini	Standard deviation	Coefficient of Variation	Relative Mean Deviation	Average MPCE
1993-94	0.279	164.94	0.58	0.054	281
2004-05	0.29	361.13	0.64	0.061	559.4
2009-10	0.29	581.79	0.62	0.059	927.7
2011-12	0.305	855.95	0.66	0.069	1286.5

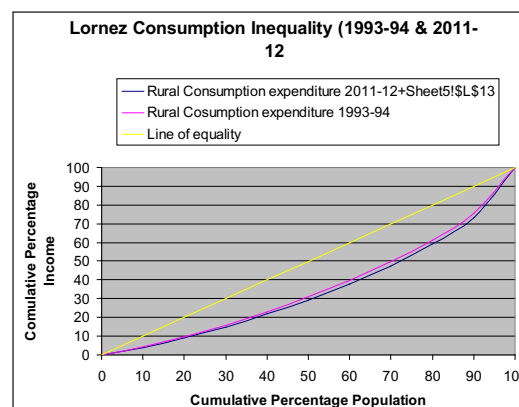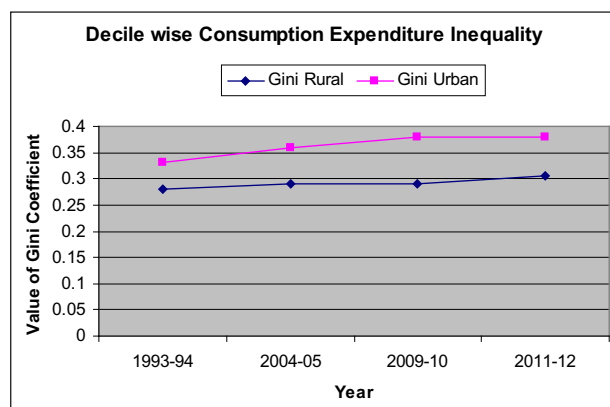*Source:* Author's own calculation Using NSSO Data.

0.54 and 0.52 and these are comparatively high from rural areas Gini values 0.47 and 0.47. Focusing on Inequalities in the consumption of food items this difference is very less in above criteria of rich and poor states according to classification.

Table 4.15
Inequalities in consumption Expenditure (Urban Areas)

Year	Gini	Standard deviation	Coefficient of Variation	Relative Mean Deviation	Average MPCE
1993-94	0.33	332.28	0.72	0.080	458.6
2004-05	0.36	844.43	0.80	0.090	1054.2
2009-10	0.38	1513.03	0.84	0.90	1786.20
2011-12	0.38	2035	0.84	0.91	2401.7

**Inequality in India: (Wage Rate in 2009-10) Ratio of Highest to Lowest**

Indicator	Regular	Casual in Public work	Casual in Other works
Urban/Rural	1.587302	1.020408	1.315789
Male/Female	1.315789	1.136364	1.515152
Richest quintile/Poorest	4.166667	1.098901	1.492537
Other/SC	1.639344	1.111111	1.086957
Overall (Highest to Lowest Population)	4.166667	1.219512	1.785714

Comparing Rural Consumption inequalities 1993-94 to 2011-12)
Source: **Author's own calculation Using (NSSO Data)**
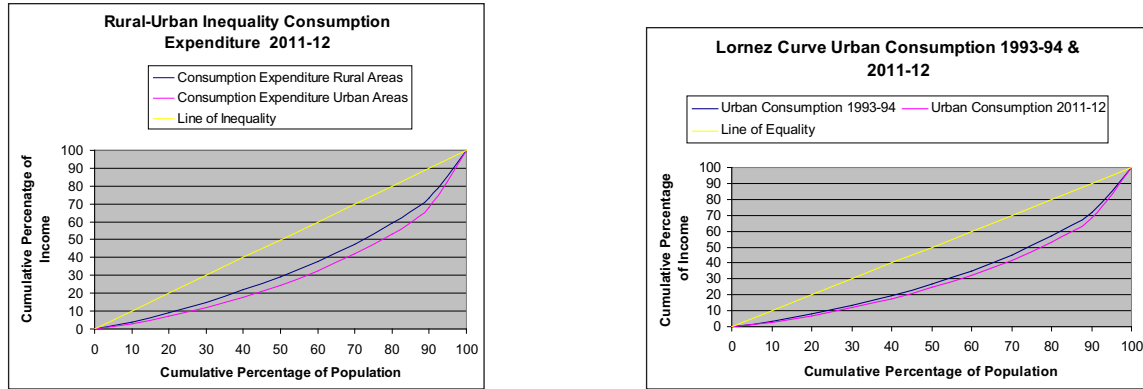
Comparing Urban Consumption Inequalities 1993-94 to 2011-12

5. CONCLUSION

Our outcomes demonstrate that the extent of interstate inequality across major states was low yet increasing, as inferred by each measure of inequality used, with few exemptions. Also, the extent of interstate income inequality turns out to be more by using per capita data rather than aggregate data. Another important conclusion that emerges from the analysis is that measures of inequality have not remained stable. There have been wide fluctuations in the value of measures of inequality over the period of analysis. Taking most popular and widely used Gini coefficient as a measure of inequality, it is empirically evident that maximum increase in the value of Gini coefficient has taken place using GSDP per capita data. Doubtlessly, the value of Gini coefficient has decreased if we use GSDP and NSDP data, however this decrease is marginal.

The rising regional disparity in the post reform era is a matter of genuine concern. With deregulation of private investment, speedier growth in turn would induce more investment, and this in turn would further emphasize regional disparity. The issue is aggravated by the negative relationship between population growth and income growth during the 1990s. Unfortunately, backward states with higher population growth are not able to attract both public and private investment due to a variety of reasons, like poor income and infrastructure and could also be probably because of poor governance. Our results support the view that there is a strong case for pro-active public policy to induce greater investment in backward states either through public investment or through fiscal incentives. Simultaneously, efforts should be made to control population growth, especially in such backward states. Finally, the quality of governance and in particular the proficiency of investment should be given more consideration at the state level.

6. LIMITATIONS OF STUDY

In this study we have examined the Gandhian Hypotheses towards the economic inequality and discrimination. The social aspect of Gandhian theory of justice has not been touched here. As far as the availability of NSSO Data in this study we have examined the Gandhian hypothesis with the help of 20 year time period.

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